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Parity Exchange Rate Deviations and the
Misvaluation of Reported Assets Under SFAS No. 70

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College of Commerce and Business Administration

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Reported Assets Under SFAS No. 70

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Abstract

The Financial Accounting Standards Board attempted to alleviate the problems with the reporting of foreign operations of U.S. multinational corporations by issuing SFAS No. 52 and SFAS No. 70. Although they may have eliminated some of the controversies of SFAS No. 8, the reporting requirements of SFAS No. 52 and SFAS No. 70 may not achieve the property of economic interpretability introduced by Beaver and Wolfson [1982] for the evaluation of foreign currency reporting alternatives.

Beaver and Wolfson [1982] point out that current costs translated at the current exchange rate are economically interpretable when the conditions of market neutrality are met. However, Glick [1986] demonstrates that when the neutrality conditions are not met, the reporting requirements of SFAS No. 70 do not produce information which is necessarily interpretable. The intent of this study is to determine the extent to which long term assets in foreign countries would be misstated under the application of the reporting requirements of SFAS No. 70.

Introduction

The Financial Accounting Standards Board (FASB) has been actively involved in the development of the appropriate accounting methods for the translation of foreign operations into the financial statements of U.S. multinational corporations. The first attempt to regulate practice, SFAS No. 8, was issued in 1975 to alleviate the problems associated with foreign currency translation by standardizing the method to be applied. This pronouncement was met by strong opposition because of its disparate treatment of long term assets and its effect to increase the volatility of reported income.

The FASB reacted to alleviate these problems, inherent in SFAS No. 8, by issuing SFAS No. 52 in December 1981. SFAS No. 52 requires the financial statement items to be translated using a current rate approach and does not report (in most cases) gains and losses from foreign currency translation as income. SFAS No. 70, issued in 1982, supplants SFAS No. 52 by requiring supplemental disclosure of the market values of fixed assets, as well as certain other items, related to foreign operations.

Although SFAS No. 52 and SFAS No. 70 may have alleviated the significant controversies of SFAS No. 8, they do not necessarily enhance the economic interpretability of the data. Beaver and Wolfson [1982] introduced the properties of economic interpretability and symmetry to the evaluation of foreign currency reporting alternatives. Given some fairly restrictive assumptions regarding the nature of financial markets they concluded that a current cost and current exchange rate method possesses

both the properties of economic interpretability and symmetry while other foreign currency translation methods are deficient. The Beaver and Wolfson [1982] results, while valid in the market context they set up, are extremely dependent upon the assumptions of market neutrality (Glick [1986]). When the conditions of neutrality in regards to international interest rates (the Fisher effect), exchange rates (Purchasing Power Parity), inflation, and domestic interest are met, the reporting requirements of SFAS No. 70, current value accounting with translation at current exchange rates, provides an accurate assessment regarding the value of the foreign operation (Glick [1986 pg. 247]). However, when the neutrality conditions are not met, the reporting requirements of SFAS No. 70 do not produce financial information which is economically interpretable.

The focus of this study is to determine the extent to which the exchange rate neutrality condition (Purchasing Power Parity) is met in the long run. Given that most computations of Purchasing Power Parity deviations are for single year periods the results of this study allow an assessment of the extent to which long term asset values are misstated. For a sample of 78 countries, the deviation of the actual exchange rate from the theoretical Purchasing Power Parity derived exchange rate and, therefore, the degree of long term asset misstatement is computed for acquisitions made from 1960 through 1983 and reported at year-end 1984.

The reported results strongly indicate that the condition of long run exchange rate neutrality is not met in most instances.

The reporting of the current values of assets in foreign countries translated at the current exchange rate do not necessarily achieve economic interpretability. In addition, the magnitude of the adjustments needed to offset the exchange rate parity deviations are reported. Glick [1986] points out the usefulness of being able to adjust the reported current values for the parity deviations in order to obtain more meaningful financial statements.

The next section introduces and illustrates the effect that Purchasing Power Parity deviations may have on the economic interpretability of asset values which are measured using current costs and translated at the current exchange rate (SFAS No. 70 requirements). The computed percentage amounts of misstatement are reported in the following section. The fourth section summarizes the results and the implications of the findings to the accounting for foreign operations.

Effects of Purchasing Power Parity Deviations on Reported Asset Values

The Purchasing Power Parity theory, an integral assumption of Beaver and Wolfson [1982, pg. 531], links the change in the foreign exchange rate between two countries to the changes in the price levels of the two countries. A change in the equilibrium exchange rate is assumed to be proportional to the change in the ratio of the foreign price level to the domestic price level.

To illustrate the effect of Purchasing Power Parity deviations on the economic interpretability of reported asset values let us assume the following (this illustration is adopted

from Ziebart [1987]):

XYZ Corporation, a multinational corporation based in the United States, purchases fixed assets in three countries during year t . At the time of the purchase the U.S. dollar value for each of the investments is \$100.00. The exchange rates for the three countries are:

Country A: 3.5 local currency units to \$1.00

Country B: 20 local currency units to \$1.00

Country C: 1 local currency unit to \$1.00.

In foreign currency units, the cost of the asset purchases are 350.00 in Country A, 2000.00 in Country B, and 100.00 in Country C. For simplicity let us assume that during time period T the foreign inflation rate is 10% in each of the three countries and that there is no inflation in the United States. In addition, let us assume that the replacement cost of the assets in each of the countries rises at the general rate of inflation in that country.

The current values of the assets at time $t+T$ in the local currency units are:

Country A: 385.00 ($350.00 * (1.10)$)

Country B: 2200.00 ($2000.00 * (1.10)$)

Country C: 110.00 ($100.00 * (1.10)$)

Assume that at time $t+T$ the current exchange rates, foreign currency units to U.S. dollars, are the following:

Country A: 4.50 local currency units to \$1.00

Country B: 21.00 local currency units to \$1.00

Country C: 1.10 local currency units to \$1.00

The foreign currency translated current values reported in the multinational corporation's financial statements will be:

Country A: \$85.56 (385.00 / 4.50)

Country B: \$104.76 (2200.00 / 21.00)

Country C: \$100.00 (110.00 / 1.10)

Note that by construction of the example, the economic value of the asset measured in U.S. dollars is \$100.00. The economic value of the asset in Country A is understated by \$14.44 (a positive parity error of 14.44%; $(4.50 - 3.85) / 4.50$) while the economic value of the asset in Country B is overstated by \$4.76 (a parity deviation of -4.76%). Only in the case of Country C is the economic value of the asset realistically reported. The failure of the reported values (current cost translated at current rates) to portray the economic value of the assets is due to the Purchasing Power Parity deviations (violation of the exchange rate neutrality assumption) for Country A and Country B. The Purchasing Power Parity exchange rates are 3.85 per \$1.00 and 22.00 per \$1.00 for Country A and Country B respectively.

The preceding simple example illustrates the difficulty involved when the exchange rate neutrality condition, assumed by Beaver and Wolfson [1982], is violated and portrays the problem with violations of the exchange rate neutrality condition pointed out analytically by Glick [1986]. Aliber and Stickney [1975] tested the validity of the Purchasing Power Parity theorem for a sample of 48 countries over the 1960 through 1971 time period and concluded that individual year parity seems to hold in the long run. However, in the measurement of long term assets it is not the individual year that is important but it is the parity deviation from the time of the asset's acquisition to the date of

the financial statement. As Glick [1986 pg. 245] points out, the deviations should be short term since arbitrage should eliminate them in the long run; however, deviations may persist from transaction costs, capital controls, government interventions, or other imperfections in financial markets. In the next section, the results of the parity deviation computations are provided.

Empirical Analysis

In order to determine the extent to which asset values may be misstated due to Purchasing Power Parity deviations the percentage deviation is computed for a sample of 78 countries. This computation is based on a year-end 1984 reporting period and computes the percentage error given that an acquisition of an asset was made during a year within the 1960 through 1983 period. Accordingly, the magnitude of the correction needed to reflect economic interpretability is determined for asset investments made during each of the 24 years and reported in a 1984 financial statement. Note that a positive parity error results in an understatement of asset current values since more local currency units are required to purchase a U.S. dollar. Alternatively, when less (than parity) local currency units are required to purchase a U.S. dollar, a negative parity error results and the current values of the assets are overstated in U.S. dollars.

The computation of the percentage parity error or correction factor is the following:

$$\text{Percentage Parity Error} = [(\text{Actual 1984 Exchange Rate}) - (\text{Parity 1984 Exchange Rate})] / (\text{Actual 1984 Exchange Rate})$$

where:

$$\text{Parity 1984 Exchange Rate} = \text{Original Exchange Rate} * \frac{[(1 + \text{Foreign Inflation Rate}) / (1 + \text{Domestic Inflation Rate})]}{1}$$

The original exchange rate and the period of time used for computation of the inflation rates is dependent on the year of acquisition chosen for analysis. In this study, all years during the 1960 through 1983 period are analyzed. The percentage parity error and, accordingly, the adjustments needed to correct current values translated at current exchange rates are provided in Table 1.

INSERT TABLE 1

Intuitively, one may have expected that the greatest deviations would be for years in which the Bretton Woods agreement was still intact; greater deviations for years in the early 1960's with smaller deviations from 1967 or so onward. Following the collapse of the Bretton Woods agreement exchange rates were allowed to more freely float and one might expect the long term deviations to have diminished under a more fluid system of exchange. A cursory review of Table 1 does not indicate this to be the case. In fact, for many countries the deviations are significantly higher in more recent years than they were during the years of the Bretton Woods agreement. Note, that for many countries, in the year 1968 (a fairly good period to denote as the demise of the Bretton Woods agreement) a significant decline in the magnitude of the parity error becomes apparent. However, the effect decays in the following years and significant parity errors persist.

It is also important to note the magnitude as well as the sign of the parity errors. For many countries the magnitude of

the error is rather small and may indicate that current values of assets translated at current rates may be reasonably interpreted economically. Examples of countries with relatively minor deviations are Canada, Guatamala, Honduras, and Netherlands Antilles. On the other hand, a couple of countries have years in which the magnitude of the error exceeds 100%; see the results for Ghana, Nigeria, or Somalia reported in Table 1. The computed parity deviations also show that the magnitude of the error as well as the sign of the error are not consistent over time. One can not easily adjust for the parity deviation without knowing the composition of the assets and the periods of acquisition.

To portay the patterns in the percentage parity deviations the percentage parity errors are graphed for a few example countries. The first set of graphs, Figure 1, shows the patterns of two countries, Australia and Japan, in which the pattern is mixed in sign over time. This indicates that one can not readily know whether the statements are overstated or understated without knowing the years in which the assets were acquired.

INSERT FIGURE 1

The second set of graphs illustrate two countries in which the parity deviation is positive for all years analyzed. This implies that for foreign operations in El Salvador or Sierra Leone the current values of assets translated at current exchange rates are systematically understated. Note the pattern for El Salvador in 1968 when the Bretton Woods agreement ended.

INSERT FIGURE 2

The third set of graphs, Figure 3, depicts the patterns for United Kingdom and Germany, two countries in which the deviations

are systematically negative. For these two countries, the current values of assets translated at the current rate of exchange are overstated.

INSERT FIGURE 3

Table 2 summarizes the countries into the three types of patterns, positive deviations, mixed sign deviations, and negative deviations.

INSERT TABLE 2

Multinational operations in countries with systematic over- or under-statement of current values translated at current exchange rates due to exchange parity deviations can be identified and although the magnitude is not known without detailed analysis, one does know the sign of the bias in the reported numbers. Of the 78 countries studied, only 7 countries display a systematic positive parity deviation (understatement of reported values) while 41 countries possess a systematic negative parity deviation (overstatement of reported values) in regards to current values translated at current exchange rates. Thirty of the countries have a mixed pattern with periods of both positive and negative parity errors.

Summary and Conclusions

The results of this study demonstrate that the notion of economic interpretability is not achieved when foreign subsidiary financial statements are translated using the current cost and current exchange rate method required by SFAS No. 70. As pointed out analytically by Glick [1986], when there exists significant

deviations from the conditions of exchange rate neutrality the value of the foreign operations is misstated.

In addition, the results indicate that the degree of misstatement is unique both across time and across countries. For many firms, 48 out of 78, the sign of the misstatement is consistent across time but the magnitude is quite varied. For the other 30 firms, even the sign of the parity deviation is not consistent across time. In addition, the results imply that the reported current values translated at current costs are not biased in a conservative manner but, in deed, are over-stated for 41 of the 78 countries studied.

From a policy point of view these results imply that the Financial Accounting Standards Board has yet to achieve economic interpretability in foreign currency translation. In order for the current cost data translated at the current exchange rate to be made more meaningful additional disclosure needs to be provided regarding the historical exchange rates, the current exchange rate, and, possibly, the degree of parity deviation for the financial statement items. This information, in combination, with the current cost values translated at the current exchange rate will allow the user to more accurately assess the results of operations and the financial position regarding foreign operations.

References

- Aliber, R. and C. Stickney (1975), "Accounting Measures of Foreign Exchange Exposure: The Long and Short of It," **Accounting Review**, January 1975, pp. 44-57.
- Beaver, W. and M. Wolfson (1982), "Foreign Currency Translation and Changing Prices in Perfect and Complete Markets," **Journal of Accounting Research**, Autumn 1982, pp. 528-550.
- Glick, R., "Market Neutrality Conditions and Valuation of a Foreign Affiliate," **Journal of Business, Finance, and Accounting**, Summer 1986, pp. 239-249.

Table 1 - Percentage Parity Deviations of Reported Current Values
Translated at Current Exchange Rates (year end 1984) for Acquisitions 1960

Year	Australia	Austria	Belgium	Bolivia	Brazil	Burma
1960	.0340	.0611	-.1753	-.4484	-.6174	-.3365
1961	.0185	.0287	-.1731	-.4817	-.5397	-.3296
1962	.0346	-.0038	-.1761	-.5052	-.5238	-.3098
1963	.0431	-.0183	-.1829	-.4957	-.6317	-.2806
1964	.0348	-.0420	-.2087	-.5364	-.4184	-.2658
1965	.0069	-.0723	-.2276	-.5423	-.5726	-.3688
1966	.0129	-.0634	-.2294	-.5590	-.6881	-.4790
1967	.0027	-.0753	-.2367	-.5923	-.6993	-.4692
1968	-.0512	-.1279	-.1002	-.2641	-.1207	-.0558
1969	.0448	-.0418	-.2122	-.5847	-.6466	-.4061
1970	.0678	-.0280	-.1969	-.5763	-.6517	-.3435
1971	-.0174	-.1129	-.2765	-.5739	-.6560	-.2362
1972	-.1046	-.1587	-.3016	-.3042	-.6636	-.2757
1973	-.2553	-.2877	-.3508	-.4380	-.6827	-.4475
1974	-.1946	-.3769	-.4410	-.6168	-.6701	-.5154
1975	-.1941	-.3223	-.4084	-.6129	-.6596	-.4423
1976	-.1308	-.3947	-.4782	-.6081	-.6548	-.5139
1977	-.2154	-.4485	-.5250	-.6139	-.6674	-.4490
1978	-.2238	-.4940	-.5724	-.6237	-.6637	-.4118
1979	-.1759	-.4950	-.5565	-.5712	-.5016	-.3885
1980	-.2045	-.4016	-.4693	-.6694	-.5235	-.2849
1981	-.1620	-.2884	-.3356	-.7237	-.5007	-.1383
1982	-.0786	-.2468	-.2081	.0499	-.4705	-.0862
1983	-.0512	-.1279	-.1002	-.2641	-.1207	-.0558
	Canada	Chile	Colombia	Congo	Costa Rica	Cyprus
1960	-.1652	-.8845	-.2767	-.2210	-.5424	-.5081
1961	-.1238	-.8844	-.3272	-.2630	-.4680	-.4997
1962	-.0963	-.7690	-.1086	-.2849	-.4763	-.4947
1963	-.0979	-.7690	-.3166	-.3346	-.4854	-.4986
1964	-.1080	-.7596	-.4113	-.3362	-.4949	-.4906
1965	-.1139	-.7472	-.1332	-.3574	-.4832	-.4835
1966	-.1118	-.7883	-.2547	-.3589	-.4683	-.4701
1967	-.1213	-.7252	-.1726	-.3689	-.4598	-.3688
1968	-.0583	-.2160	-.1324	-.0605	-.0240	-.1217
1969	-.1193	-.6950	-.1164	-.2378	-.4446	-.3471
1970	-.1490	-.7086	-.0630	-.2102	-.4382	-.3248
1971	-.1451	-.6600	-.0179	-.2511	-.4317	-.3644
1972	-.1629	-.6905	-.0249	-.3088	-.4387	-.3871
1973	-.1728	.0435	-.0676	-.3478	-.4814	-.4319
1974	-.1759	-.0051	-.0383	-.3522	-.4298	-.4629
1975	-.1679	.0394	-.0172	-.3925	-.4701	-.3827
1976	-.1869	-.2772	-.0468	-.3357	-.4583	-.3422
1977	-.1305	-.3562	-.2028	-.4145	-.4464	-.3936
1978	-.0732	-.3996	-.2135	-.4921	-.4380	-.4417
1979	-.0653	-.4245	-.2467	-.4971	-.4272	-.4417
1980	-.0154	-.5165	-.2178	-.4024	-.4495	-.4112
1981	-.0401	-.5541	-.2143	-.2829	.8867	-.3031
1982	-.0462	-.1887	-.2025	-.2094	.1630	-.2150
1983	-.0583	-.2160	-.1324	-.0605	-.0240	-.1217

	Denmark	Dominican Republic	Egypt	El Salvador	Ecuador	Fiji
1960	.1023	.4695	-.1585	.3557	-.1738	-.1048
1961	.0726	.5460	-.1551	.4101	-.0362	-.1008
1962	.0120	.4313	.0911	.4228	-.0531	-.1087
1963	.0316	.3338	.0966	.4186	-.0951	-.1033
1964	-.0490	.3233	.0712	.4144	-.1186	-.1169
1965	-.0855	.3705	-.0528	.4270	-.1314	-.1722
1966	-.1165	.4088	-.1041	.4891	-.1512	-.1401
1967	-.0943	.4311	-.0863	.5097	-.1593	-.0282
1968	-.1062	.2176	.1222	.0700	.0138	-.0761
1969	-.1074	.5561	-.0420	.6193	-.1673	-.0240
1970	-.1128	.5876	-.0226	.6681	.1654	-.0052
1971	-.1752	.5876	-.0112	.7329	.1213	-.0864
1972	-.2251	.5213	.0004	.7619	.0735	-.1091
1973	-.3090	.4037	-.0833	.7586	.0089	-.1835
1974	-.4019	.3764	-.0824	.6698	-.0917	-.2175
1975	-.3490	.3115	-.0875	.5283	-.1413	-.1856
1976	-.4080	.2872	-.1247	.5112	-.1793	-.1563
1977	-.4335	.2153	-.1728	.4396	-.2265	-.2271
1978	-.5123	.2634	-.1989	.3683	-.2549	-.2620
1979	-.4780	.2877	.4513	.3289	-.2482	-.2140
1980	-.4085	.2513	.3648	.2848	-.2449	-.2670
1981	-.2880	.2851	.3648	.2355	-.2622	-.1935
1982	-.2139	.2684	.2625	.1747	-.1067	-.1351
1983	-.1062	.2176	.1222	.0700	.0138	-.0761

	Finland	France	Germany	Ghana	Greece	Guatamala
1960	-.0648	-.1878	-.0558	1.1096	-.3349	-.1066
1961	-.0672	-.1986	-.1051	1.0121	-.3401	-.0923
1962	-.0964	-.2298	-.1212	.8628	-.3302	-.1012
1963	-.1283	-.2581	-.1415	.8127	-.3412	-.0913
1964	-.2001	-.2713	-.1495	.6193	-.3386	-.0776
1965	-.2246	-.2788	-.1567	.3016	-.3482	-.0553
1966	-.2305	-.2679	-.1667	.1844	-.3600	-.0328
1967	-.0230	-.2744	-.1523	.9009	-.3531	-.0107
1968	-.0872	-.1039	-.1505	-.1965	-.1282	-.0086
1969	-.0385	-.1869	-.1702	.8032	-.3090	.0444
1970	-.0142	-.1925	-.1598	.8540	-.2888	.0801
1971	-.0415	-.2444	-.2536	2.1437	-.2798	.1322
1972	-.0688	-.2790	-.2842	1.0765	-.2867	.1637
1973	-.1805	-.3445	-.4002	.6833	-.3507	.0860
1974	-.2801	-.3958	-.4453	.5821	-.4263	.0347
1975	-.2772	-.4050	-.3781	.3298	-.3441	-.0027
1976	-.3459	-.3636	-.4316	-.0987	-.3638	-.0469
1977	-.3407	-.4135	-.4799	-.5566	-.4205	-.0985
1978	-.3570	-.4861	-.5268	-.3410	-.4385	-.1010
1979	-.3707	-.5031	-.5208	-.5249	-.4416	-.1026
1980	-.3378	-.4433	-.4161	-.6408	-.3831	-.0799
1981	-.2593	-.3101	-.3021	-.8168	-.3226	-.0882
1982	-.1261	-.2333	-.2581	-.8409	-.2720	-.0355
1983	-.0872	-.1039	-.1505	-.1965	-.1282	-.0086

	Haiti	Honduras	Iceland	India	Iran	Ireland
1960	.4352	.0645	-.2353	-.3740	.5617	-.0243
1961	.3992	.0582	-.1590	-.3781	.5314	-.0410
1962	.4231	.0593	-.2354	-.3895	.5375	-.0677
1963	.3822	.0398	-.3177	-.3995	.5513	-.0776
1964	.2810	.0079	-.4201	-.4624	.5110	-.1222
1965	.2735	-.0077	-.4484	-.5019	.5036	-.1545
1966	.2122	.0060	-.4881	-.2647	.5549	-.1507
1967	.2835	.0259	-.3235	-.3371	.5629	-.0190
1968	.0201	.0048	-.1132	-.1241	-.0611	-.0904
1969	.3723	.0530	-.1700	-.3032	.6701	-.0396
1970	.4346	.1052	-.2235	-.2964	.7408	-.0573
1971	.3665	.1290	-.2447	-.3167	.7424	-.1533
1972	.3678	.1065	-.2079	-.2553	.6901	-.1253
1973	.1839	.1170	-.4093	-.3184	.4473	-.1572
1974	.1427	.0992	-.3532	-.4113	.4055	-.2090
1975	.0674	.1282	-.3174	-.3331	.3926	-.1716
1976	.0554	.1389	-.3933	-.2395	.3495	-.1171
1977	.0554	.1190	-.4438	-.3094	.1275	-.2607
1978	.1671	.1348	-.3800	-.2769	.0861	-.3074
1979	.1486	.1227	-.4112	-.2696	.0940	-.3541
1980	.1066	.1023	-.3339	-.2536	.0556	-.2989
1981	.1016	.1043	-.3603	-.1633	.0309	-.2286
1982	.0893	.0661	-.0732	-.1280	-.0314	-.2086
1983	.0201	.0048	-.1132	-.1241	-.0611	-.0904

	Israel	Italy	Jamaica	Japan	Kenya	Korea
1960	-.7516	-.1445	-.4520	.8758	-.2079	-.4920
1961	-.7646	-.1528	-.4832	.8171	-.2180	-.0515
1962	-.6378	-.1812	-.4832	.7063	-.2339	-.1013
1963	-.6561	-.2277	-.4867	.6186	-.2293	-.2402
1964	-.6689	-.2583	-.4892	.5652	-.2146	.1694
1965	-.6876	-.2790	-.4952	.5012	-.2400	.1113
1966	-.7018	-.2744	-.4897	.4819	-.2466	.0180
1967	-.6483	-.2814	-.4053	.4611	-.2377	-.0418
1968	-.2339	-.0893	-.1853	-.0930	-.0772	-.0570
1969	-.6309	-.2401	-.4198	.4308	-.1653	-.0648
1970	-.6316	-.2360	-.4295	.4076	-.1342	-.1128
1971	-.5883	-.2750	-.4687	.2179	-.1292	-.0383
1972	-.6234	-.3052	-.4340	.1550	-.1522	-.0494
1973	-.6667	-.3050	-.4548	.0181	-.2043	-.0252
1974	-.6216	-.3080	-.5243	-.0236	-.2231	.0600
1975	-.6493	-.3280	-.5579	-.0339	-.1771	-.0771
1976	-.6520	-.2125	-.5740	-.1026	-.2137	-.1531
1977	-.5158	-.2860	-.5920	-.2747	-.3030	-.1815
1978	-.5725	-.3475	-.3933	-.3904	-.4023	-.2309
1979	-.5039	-.3870	-.4502	-.1933	-.3904	-.2764
1980	-.4796	-.3357	-.5098	-.2820	-.3720	-.1299
1981	-.4523	-.1971	-.5198	-.1814	-.1572	-.1594
1982	-.4307	-.1644	-.5212	-.0945	-.0804	-.1106
1983	-.2339	-.0893	-.1853	-.0930	-.0772	-.0570

	Luxembourg	Malaysia	Malta	Mauritania	Mexico	Morocco
1960	-.2543	-.1274	-.4520	.1652	-.2395	-.3650
1961	-.2486	-.1190	-.4596	.1645	-.2440	-.3694
1962	-.2476	-.1072	-.4547	.1508	-.2440	-.3972
1963	-.2574	-.1239	-.4579	.0563	-.2395	-.4235
1964	-.2747	-.1055	-.4632	-.0106	-.2462	-.4384
1965	-.2865	-.0938	-.4632	.0138	-.2607	-.4484
1966	-.2820	-.0714	-.4494	.0104	-.2692	-.4201
1967	-.2839	-.0917	-.3434	-.0101	-.2699	-.4037
1968	-.1061	-.0395	-.1352	-.1305	.1860	-.0905
1969	-.2501	.0097	-.3103	.1549	-.2427	-.3631
1970	-.2406	.0501	-.2956	.1384	-.2377	-.3388
1971	-.3185	.0110	-.3417	.0443	-.2449	-.3729
1972	-.3402	-.0122	-.3163	-.0273	-.2572	-.3883
1973	-.3816	-.1737	-.3435	-.1131	-.2956	-.4262
1974	-.4514	-.2631	-.3406	-.1923	-.3685	-.4750
1975	-.4089	-.1390	-.2890	-.1789	-.4019	-.4655
1976	-.4815	-.1304	-.2098	-.2660	-.1279	-.4414
1977	-.5263	-.1754	-.2930	-.2522	-.1794	-.4902
1978	-.5677	-.2112	-.3303	-.2470	-.2490	-.5508
1979	-.5516	-.1591	-.3420	-.2376	-.2903	-.5563
1980	-.4619	-.0919	-.3358	-.2152	-.3501	-.4664
1981	-.3296	-.0779	-.2808	-.2265	-.3673	-.3557
1982	-.2060	-.0418	-.2257	-.2106	.5554	-.2722
1983	-.1061	-.0395	-.1352	-.1305	.1860	-.0905

	Netherlands	Netherlands Antilles	New Zealand	Nigeria	Norway	Pakistan
1960	.1236	.0328	-.2993	2.4035	.1308	-.4678
1961	.0666	.0359	-.3044	2.2340	.1167	-.4710
1962	.0541	.0462	-.3134	2.1050	.0726	-.4601
1963	.0326	.0425	-.3166	2.2295	.0596	-.4513
1964	-.0135	.0433	-.3289	2.2455	.0161	-.4600
1965	-.0485	.0571	-.3448	2.1676	-.0116	-.4854
1966	-.0712	.0789	-.3387	1.9770	-.0109	-.4927
1967	-.0811	.0949	-.2111	2.1779	-.0277	-.5349
1968	-.1449	-.0211	-.2571	.2397	-.1339	-.1017
1969	-.0878	.1762	-.2060	2.1831	.0007	-.4945
1970	-.0762	.2023	-.2071	1.9647	-.0423	-.4864
1971	-.1874	.1722	-.3017	1.4531	-.1186	-.5037
1972	-.2296	.1632	-.3253	1.4671	-.1579	.1217
1973	-.3368	.1427	-.4458	1.4791	-.2831	-.1315
1974	-.4040	.0624	-.3994	1.2911	-.3390	-.2392
1975	-.3688	.0026	-.2787	.9027	-.3066	-.3134
1976	-.4401	.0083	-.2840	.6302	-.3763	-.3224
1977	-.4804	.0179	-.3790	.5027	-.3965	-.3445
1978	-.5367	.0123	-.4291	.3541	-.4124	-.3353
1979	-.5210	.0113	-.3951	.1743	-.3880	-.3169
1980	-.4296	.0016	-.3996	.1622	-.3407	-.3071
1981	-.3158	-.0144	-.3290	.2414	-.2823	-.3164
1982	-.2705	-.0135	-.3098	.2905	-.1690	-.1109
1983	-.1449	-.0211	-.2571	.2397	-.1339	-.1017

	Panama	Paraguay	Peru	Phillipines	Portugal	Saudi Arabia
1960	-.2623	.1708	-.4176	-.6430	.0043	.3509
1961	-.2587	-.0011	-.4440	-.6437	-.0007	.3509
1962	-.2557	-.0041	-.4725	-.3380	-.0145	.3509
1963	-.2505	-.0129	-.4959	-.3678	-.0209	.3509
1964	-.2586	-.0138	-.5353	-.4081	-.0388	.3509
1965	-.2505	-.0347	-.5937	-.4128	-.0604	.3509
1966	-.2288	-.0329	-.6157	-.4270	-.0726	.3509
1967	-.2181	-.0195	-.4813	-.4422	-.1001	.3509
1968	-.0259	-.3940	-.1964	-.0191	-.0403	.3509
1969	-.1698	.0474	-.5497	-.4114	-.1500	.3670
1970	-.1472	.1170	-.5458	-.1069	-.1511	.3872
1971	-.1280	.1116	-.5564	-.1907	-.2421	.3967
1972	-.1446	.0487	-.5716	-.1992	-.3072	-.0721
1973	-.1502	-.0100	-.5855	-.2596	-.3762	.4587
1974	-.1924	-.1223	-.6064	-.3537	-.4732	.5417
1975	-.1648	-.1034	-.5960	-.3084	-.4763	.4191
1976	-.1503	-.0931	-.5064	-.3168	-.4552	.4055
1977	-.1341	-.1164	-.2846	-.3309	-.4238	.0960
1978	-.1058	-.1403	-.2660	-.3305	-.4157	.0021
1979	-.0777	-.2542	-.3752	-.3569	-.4316	-.1923
1980	-.0801	-.3085	-.3924	-.3648	-.4105	-.3507
1981	-.0535	-.3303	-.4317	-.3393	-.3328	-.3836
1982	-.0363	-.3341	-.2833	-.2866	-.2118	-.3625
1983	-.0259	-.3940	-.1964	.0191	-.0403	-.2925

	Sierra Leone	Singapore	Somalia	South Africa	Sri Lanka	Sudan
1960	.5667	-.0257	1.3709	-.3904	-.7254	.4114
1961	.5177	-.0221	1.1850	-.3971	-.7255	.3138
1962	.5514	-.0130	1.2201	-.3973	-.7265	.3060
1963	.5610	-.0227	1.1856	-.3965	-.7292	.2624
1964	.4214	-.0224	.9576	-.4028	-.7333	.2308
1965	.3745	-.0129	.7601	-.4188	-.7298	.2812
1966	.3634	.0042	.8746	-.4189	-.7209	.2976
1967	.5492	-.0048	.9329	-.4258	-.6514	.2028
1968	.5972	-.0393	.2449	-.3410	.0635	.2860
1969	.6282	.0968	.9314	-.4002	-.6614	.3036
1970	.6252	.1531	1.0271	-.3884	-.6614	.3274
1971	.6105	.1135	1.1270	-.3555	-.6561	.3653
1972	.7142	.0934	1.2085	-.3605	-.6243	.2437
1973	.7409	-.1434	1.2120	-.4683	-.6336	.1456
1974	.6709	-.2776	.8694	-.4566	-.6408	.0084
1975	.7645	-.1728	.7081	-.3413	-.5767	-.1128
1976	.8934	-.1201	.5839	-.3733	-.4935	-.0770
1977	.6631	-.1352	.5251	-.3998	-.0605	-.1606
1978	.6134	-.1785	.4919	-.4140	-.1014	-.1295
1979	.4654	-.1227	.3358	-.4560	-.1009	-.0765
1980	.5281	-.1101	-.0452	-.5065	-.0576	-.1639
1981	.5169	-.1127	-.2700	-.3936	.0075	.3348
1982	.2898	-.0661	.5150	-.3683	.0018	.6274
1983	.5972	-.0393	.2449	-.3410	.0635	.2860

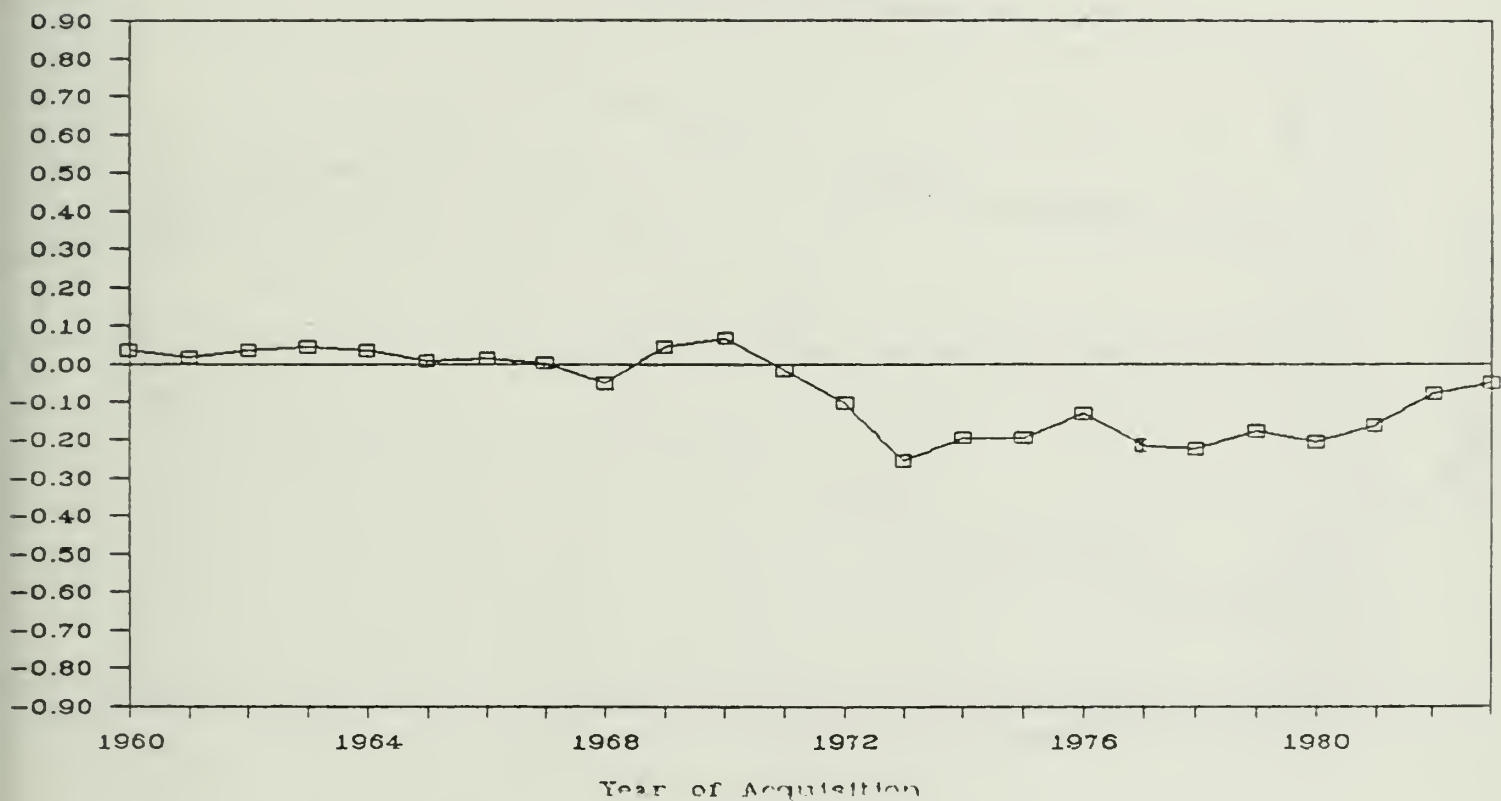
	Suriname	Swaziland	Sweden	Switzerland	Syria	Thailand
1960	.5600	-.3415	-.1570	.2738	.3723	-.1187
1961	.5508	-.3424	-.1652	.2671	.3602	-.1763
1962	.5296	-.3413	-.1942	.2290	.5253	-.2027
1963	.5236	-.3398	-.2057	.2018	.5134	-.2027
1964	.4840	-.3383	-.2296	.1808	.4476	-.1862
1965	.4739	-.3414	-.2499	.1610	.5273	-.1749
1966	.4541	-.3390	-.2732	.1457	.4883	-.1851
1967	.3479	-.3372	-.2857	.1319	.4641	-.1949
1968	-.0066	-.3332	-.0782	-.1619	.0508	-.1805
1969	.2113	-.3164	-.2497	.1837	.5661	-.1466
1970	.2503	-.2872	-.2574	.2094	.5917	-.0953
1971	.2324	-.2247	-.3214	.0734	.5826	-.0602
1972	.2324	-.1991	-.3552	.0017	.6218	-.0745
1973	.1583	-.3569	-.3793	-.1588	.4178	-.1715
1974	.0998	-.3837	-.4424	-.3341	.3372	-.2602
1975	.1069	-.2517	-.4045	-.2977	.3084	-.2325
1976	.0637	-.2438	-.4625	-.3167	.3182	-.2200
1977	.0326	-.3333	-.4191	-.4137	.2557	-.2280
1978	.0213	-.3333	-.4768	-.4945	.2868	-.2305
1979	-.0029	-.3944	-.4756	-.4704	.3667	-.2194
1980	-.0003	-.4774	-.4480	-.3558	.3046	-.2524
1981	.0153	-.3836	-.3074	-.3180	.2164	-.1835
1982	.0049	-.3353	-.1132	-.2400	.1302	-.1765
1983	-.0066	-.3332	-.0782	-.1679	.0508	-.1805

	Togo	Trinidad & Tobago	Tunisia	Turkey	United Kingdom	Uruguay
1960	-.3785	.5663	-.5185	-.5635	-.1694	-.2249
1961	-.3789	.5576	-.5328	-.5609	-.1844	-.3603
1962	-.3789	.5320	-.5080	-.5686	-.2048	-.4168
1963	-.3787	.4968	-.5152	-.5766	-.2086	-.2746
1964	-.3771	.5077	-.4164	-.5773	-.2221	-.4116
1965	-.3744	.4994	-.4438	-.5945	-.2485	.2236
1966	-.3568	.4917	-.4481	-.5995	-.2509	-.0751
1967	-.3292	.7416	-.4491	-.6145	-.1297	.3183
1968	-.1956	.0872	-.1272	-.0935	-.1977	-.1327
1969	-.2153	.7286	-.4330	-.6096	-.1319	-.3322
1970	-.2102	.7912	-.4061	-.3608	-.1335	-.3956
1971	-.2680	.6912	-.4606	-.4537	-.2252	-.2476
1972	-.3112	.7391	-.4486	-.4952	-.1877	-.1288
1973	-.3514	.6260	-.4857	-.5355	-.2008	-.3988
1974	-.3975	.4635	-.4990	-.5602	-.2435	-.3344
1975	-.4378	.5838	-.4779	-.5640	-.2287	-.3401
1976	-.4094	.5329	-.4689	-.5675	-.1674	-.3207
1977	-.5139	.4602	-.4931	-.5771	-.3161	-.3815
1978	-.5372	.4258	-.4930	-.5933	-.3634	-.3995
1979	-.5392	.3835	-.4863	-.6007	-.4285	-.5192
1980	-.4768	.3364	-.4394	-.4502	-.4874	-.6047
1981	-.3858	.2908	-.3000	-.3414	-.3678	-.6234
1982	-.6234	.2295	-.2192	-.2526	-.2694	-.0215
1983	-.1956	.0872	-.1272	-.0953	-.1977	-.1327

		Western				
	Venezuela	Samoa	Yugoslavia	Zaire	Zambia	Zimbabwe
1960	-.5422	-.3275	-.4041	-.7927	-.3037	-.3916
1961	-.5249	-.3228	-.3435	-.7347	-.2975	-.3916
1962	-.5172	-.3321	-.3994	-.7347	-.2988	-.3916
1963	-.5167	-.3294	-.4282	-.3159	-.2876	-.3916
1964	-.3374	-.3549	-.4777	-.4882	-.3000	-.3970
1965	-.3380	-.3568	-.3350	-.4656	-.3421	-.3970
1966	-.3296	-.3581	-.4567	-.5266	-.3845	-.3970
1967	-.3115	-.3344	-.4751	.0827	-.3974	-.3946
1968	-.3832	-.2039	-.1158	.0866	-.2101	-.1521
1969	-.2703	-.3068	-.4963	-.2696	-.4172	-.3469
1970	-.2461	-.2873	-.5133	-.2838	-.3985	-.3226
1971	-.2552	-.3341	-.4023	-.2940	-.4082	-.3682
1972	-.2523	-.3633	-.4686	-.3702	-.4178	-.3651
1973	-.2486	-.4563	-.5659	-.4219	-.4775	-.3460
1974	-.2299	-.5168	-.5687	-.4963	-.4634	-.3190
1975	-.2376	-.3781	-.5975	-.5740	-.4683	-.3589
1976	-.2497	-.3561	-.6121	-.5706	-.4161	-.3944
1977	-.2587	-.4391	-.6349	-.7388	-.5029	-.3881
1978	-.2553	-.4364	-.6511	-.7707	-.5240	-.3510
1979	-.2626	-.2800	-.6704	-.7539	-.5223	-.3889
1980	-.3117	-.3733	-.5597	-.7103	-.4991	-.3845
1981	-.3449	-.3208	-.5033	-.5659	-.4670	-.3167
1982	-.3658	-.3138	-.4069	-.6467	-.4701	-.1588
1983	-.3832	-.2039	-.1158	.0866	-.2101	-.1521

Figure 1. Graphs of Parity Deviations for Asset Acquisitions over Time for Australia and Japan

Australia



Japan

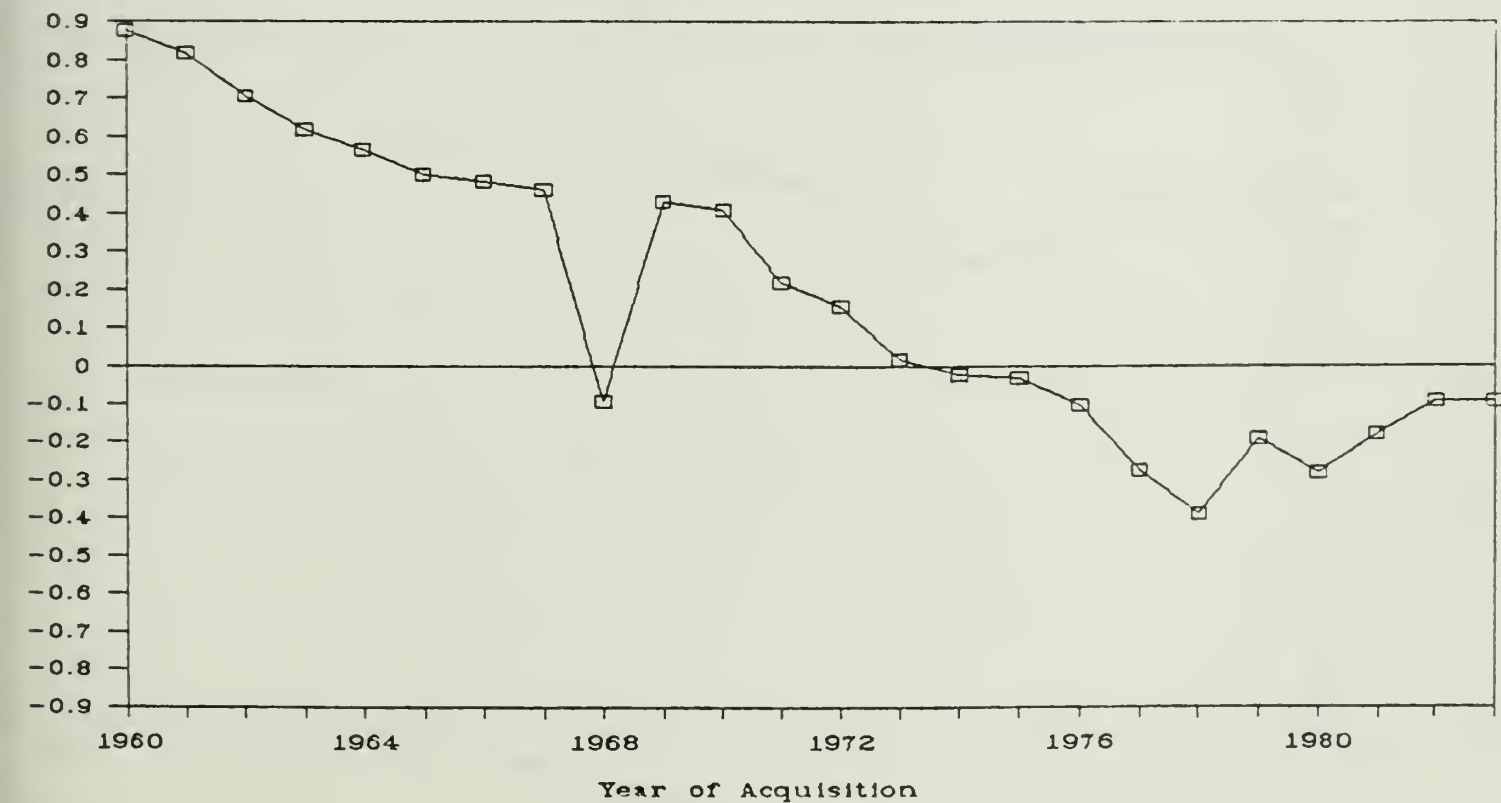
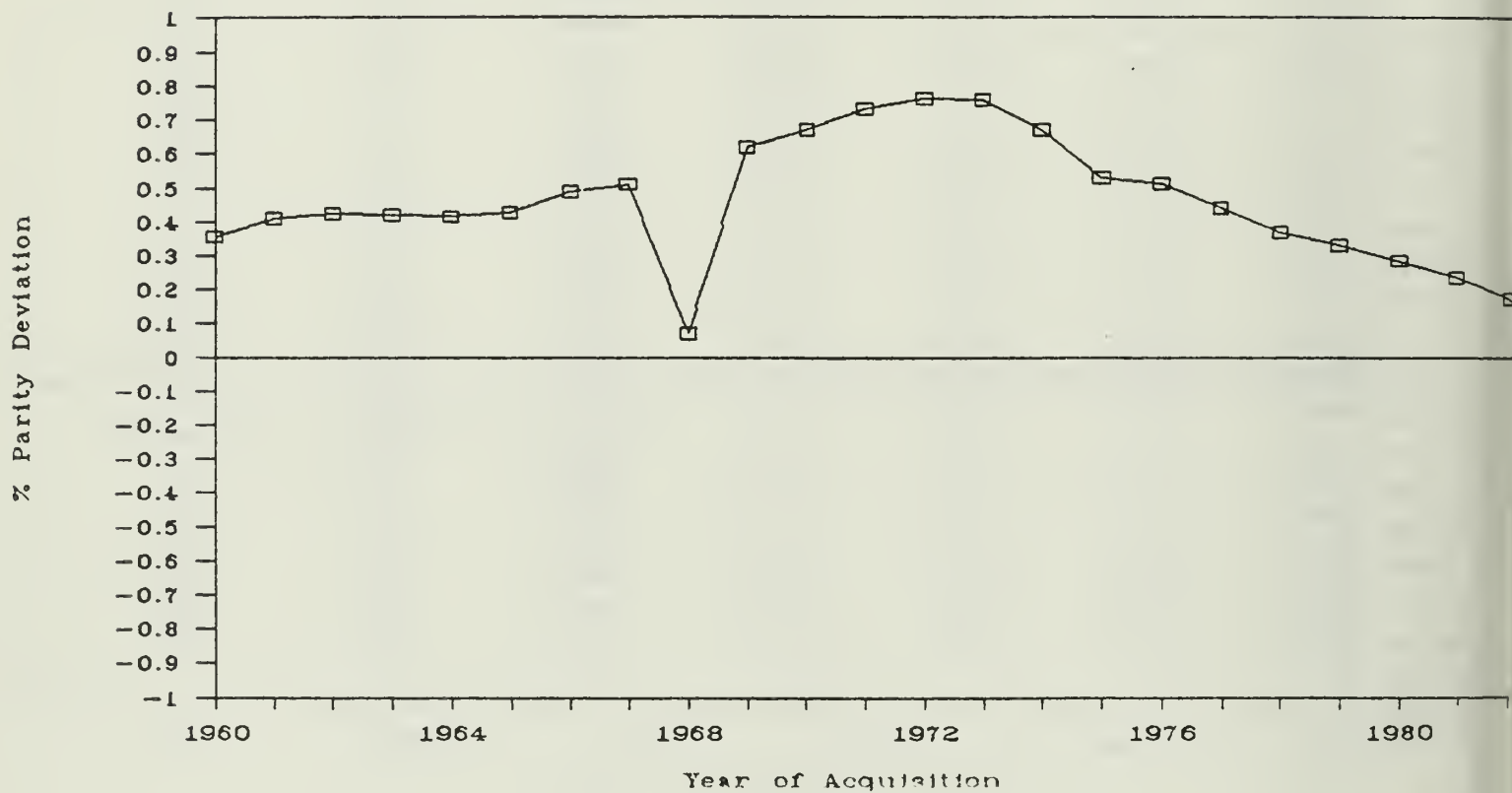


Figure 2. Graphs of Parity Deviations for Asset Acquisitions over Time for El Salvador and Sierra Leone

El Salvador



Sierra Leone

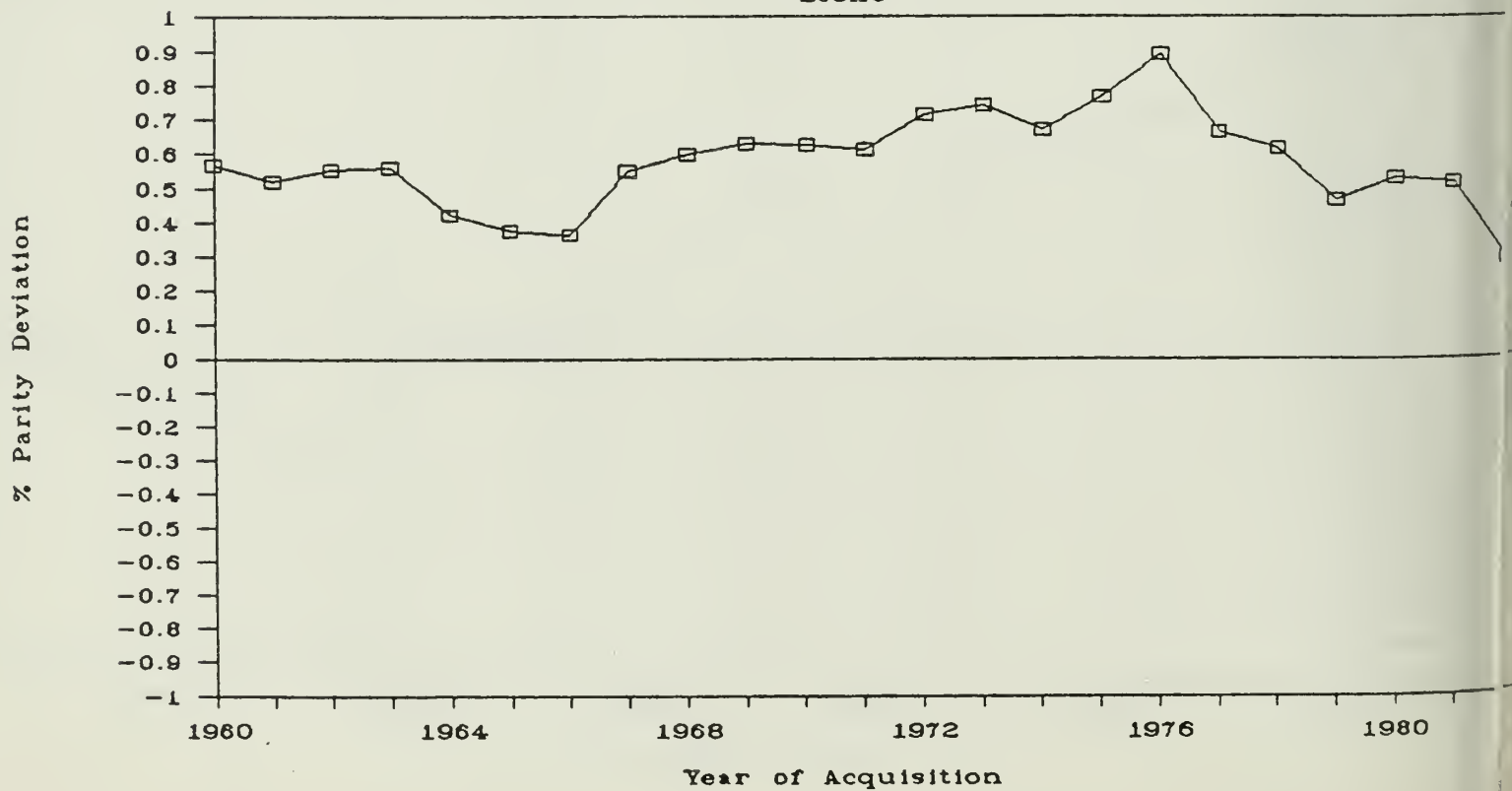
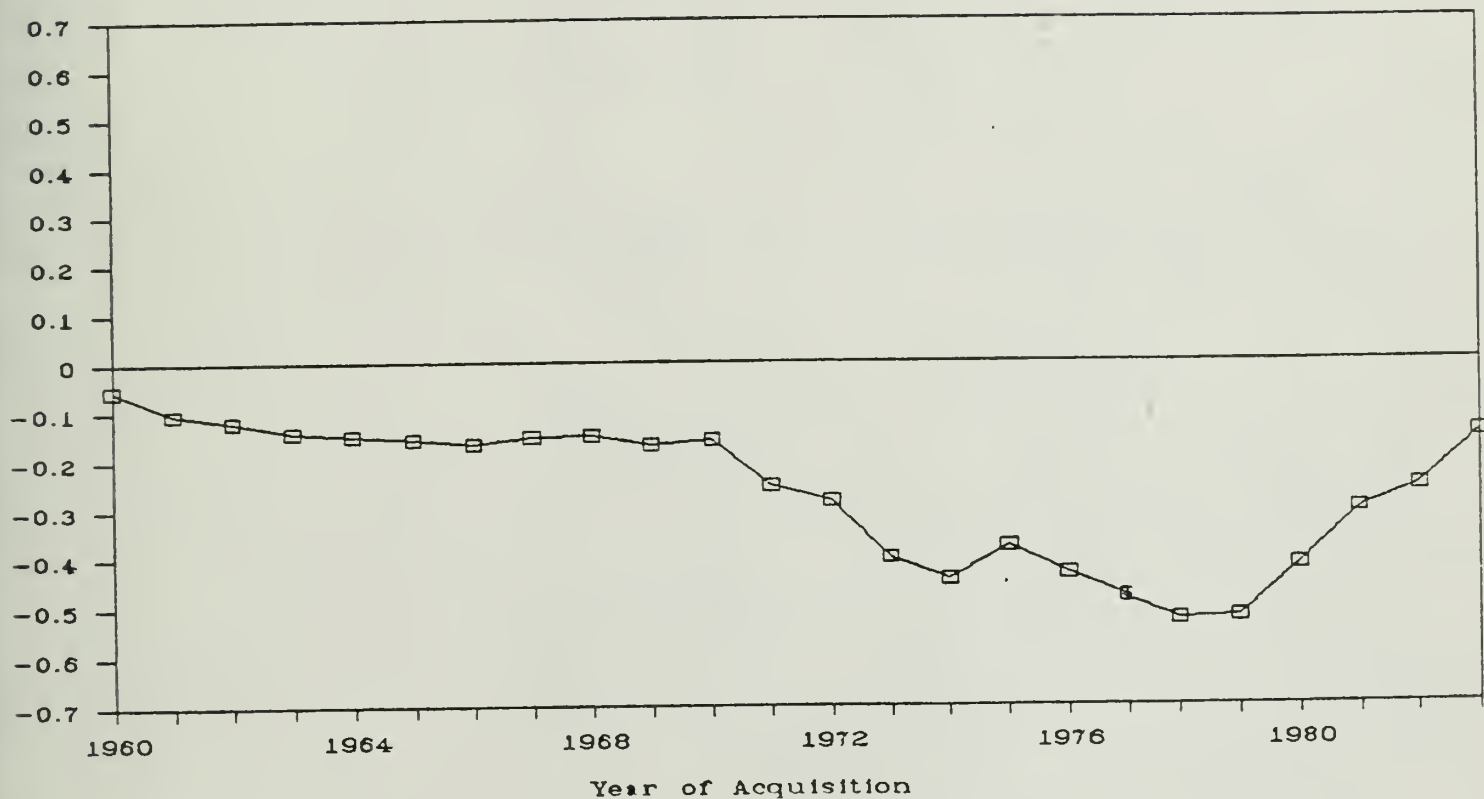


Figure 3. Graphs of Parity Deviations for Asset Acquisitions over Time for Germany and United Kingdom

Germany



United Kingdom

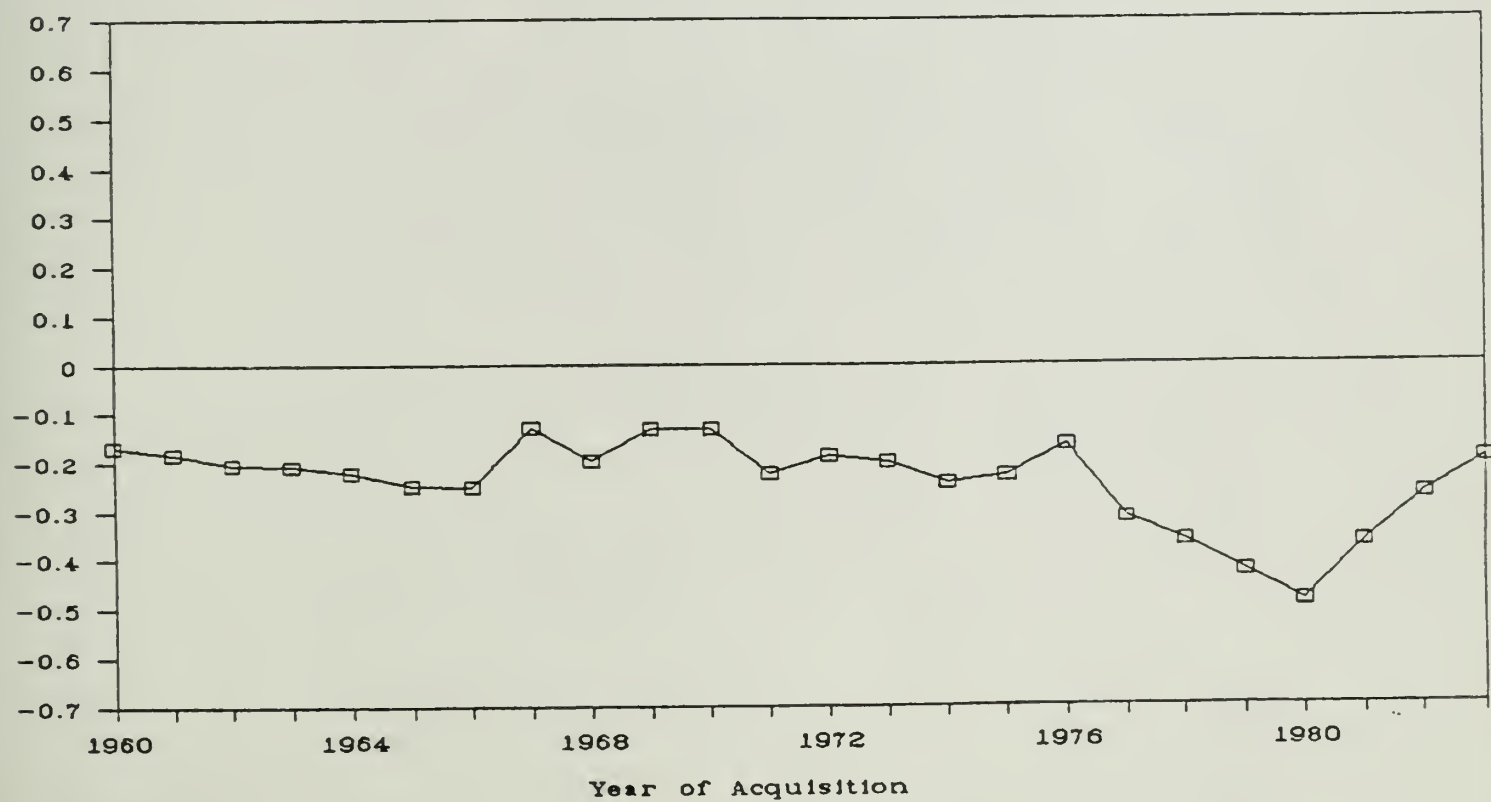


Table 2. Countries Classified by Patterns of Parity Deviations

Positive Parity Deviations: Under-statement of Reported Items

Dominican Republic	El Salvador	Haiti
Nigeria	Sierra Leone	Syria
Trinidad		

Negative Parity Deviations: Over-statement of Reported Items

Belgium	Bolivia	Brazil
Burma	Canada	Chile
Colombia	Congo	Cyprus
Fiji	Finland	France
Germany	Greece	Iceland
India	Ireland	Israel
Italy	Jamaica	Kenya
Luxembourg	Malta	Morocco
New Zealand	Panama	Peru
Portugal	South Africa	Swaziland
Sweden	Thailand	Togo
Tunisia	Turkey	United Kingdom
Venezuela	Western Samoa	Yugoslavia
Zambia	Zimbabwe	

Mixed Sign Parity Deviations

Australia	Austria	Costa Rica
Denmark	Egypt	Equador
Ghana	Guatemala	Honduras
Iran	Japan	Korea
Malaysia	Mauritania	Mexico
Netherlands	Netherlands Antilles	
Norway	Pakistan	Paraguay
Philippines	Saudi Arabia	Singapore
Somalia	Sri Lanka	Sudan
Suriname	Switzerland	Uruguay
Zaire		

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